

## DT Progression Mapping

<b>EYFS; KS1; KS2</b>	These are the minimum end of year expectations for our EYFS learners in relation to Understanding the World		This document shows how the design and technology objectives are designed in a progressive way to ensure learners become more proficient in DT as they move through the school, securing and applying the DT mastery objectives. Each teacher should be aware of their own DT objectives, and of those which have come before.					
	<b>Nursery</b>	<b>Reception</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Potential hooks and driving context</b>								
<b>Enrichment/Trips / Residentials</b>	Enterprise fair	Enterprise fair	Enterprise fair	Enterprise fair	Enterprise fair	Enterprise fair	Enterprise fair Goblin car	Enterprise fair
<b>Design</b>								
	Learning Objectives:							

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	<p>I can develop my own ideas related to the task and choose the right materials to express them.</p>	<p>I can develop my own ideas through experimentation with diverse materials to express &amp; communicate their discoveries &amp; understanding</p> <p>I can create collaboratively sharing ideas, resources &amp; skills</p>	<p>I can use scissors correctly and with purpose to create a product</p> <p>I can follow design criteria to up with my own product</p> <p>I can discuss my design ideas as a whole class</p> <p>I can draw and label my design</p> <p>I can design a picture with a moving mechanism</p> <p>I can choose to use a sliding mechanism, levers/pivots or wheel mechanism for my moving picture</p> <p>I can follow a design brief to create my moving picture</p>	<p>I can follow design criteria to come up with my own project</p> <p>I can discuss my design ideas as part of a group</p> <p>I can create a detailed design of my product using accurate labels to show what materials and tools I am using</p> <p>I can think about the purpose and use of my product</p> <p>I can create simple adverts for my product focusing on the quality, design and benefits</p> <p>I can create animated slide shows (power points) to 'advertise' my product</p>	<p>I can begin to research products using ICT/books before the design process</p> <p>I can use research to develop design criteria</p> <p>I can follow my own design criteria to come up with a [product]</p> <p>I can plan what materials and components I will use to make my [product]</p> <p>I can consider the purpose and functionality of a product before I design it</p> <p>I can discuss my ideas as part of a group</p> <p>I can create my detailed design using labels, model mock ups and ICT (where appropriate)</p> <p>I can write about who my product is for and explain why it will be useful, using examples</p>	<p>I can use a diagram to design a product and label and annotate my design</p> <p>I can use ICT/books to research my product and its functionality</p> <p>I can use research to develop design criteria</p> <p>I can follow the design criteria of a product and come up with my own design</p> <p>I can discuss my design ideas as part of a group</p> <p>I can consider the purpose and functionality of a product before I design it</p> <p>I can write about what my product is used for and explain why it is useful, giving examples</p> <p>I can create my detailed design using labels, model mock ups and ICT (where appropriate)</p>	<p>I can use research and develop design criteria to design innovative, functional and appealing products that are fit for purpose.</p> <p>I can generate, develop, model and communicate my ideas through discussion, annotated sketches, diagrams (cross-sectional, exploded), prototypes, pattern pieces and computer aided design</p> <p>I can produce detailed, step by step plans that can be followed by myself and by others</p> <p>I can use my previous knowledge to plan what tools and materials I will need to complete my product</p> <p>I can suggest alternative plans and say what the good points/drawbacks of each are</p>	<p>I can use research and develop design criteria to create innovative, functional and appealing products that are fit for purpose</p> <p>I can use the results of investigations, information sources, including ICT when developing ideas</p> <p>I can generate, develop, model and communicate my ideas through discussion, annotated sketches, diagrams (cross-sectional, exploded), prototypes, pattern pieces and computer aided design</p> <p>I can produce detailed, step by step plans that can be followed by myself and by others</p> <p>I can use my previous knowledge to plan what tools and materials I will need to complete my product</p> <p>I can suggest alternative plans and say what the good points/drawbacks of each are</p>
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Make	
	Learning Objectives:

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	<p>I can use various construction materials, e.g. joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces</p> <p>I can use available resources to create props or creates imaginary ones to support play</p>	<p>I can use increasing knowledge and understanding of tools and materials to explore my interests , and develop my thinking</p> <p>I can create representations of both imaginary &amp; real-life ideas, events, people &amp; objects</p>	<p>I can use scissors to safely cut</p> <p>I can cut, fold and join.</p> <p>I can create a simple sliding mechanism</p> <p>I can use levers and pivots to create a moving mechanism</p> <p>I can make a simple wheel mechanism</p> <p>I can follow my design to make a product</p>	<p>I can make my [product] based on my own design</p> <p>I can select the correct materials from a range to create my [product]</p> <p>I can select the correct tool to create my [product]</p> <p>I can tools and equipment safely and accurately to create my [product]</p> <p>I can safely use a needle and thread to sew and attach</p> <p>I can use simple sewing skills, i.e. running stitch, to create a [product]</p> <p>I can use a saw and woodblock safely</p> <p>I can use a glue gun safely</p>	<p>I can select and use a wide range of materials to create my product</p> <p>I can begin to measure and mark out using a rule in cm before cutting materials</p> <p>I can use a vice to secure materials before cutting</p> <p>I can use a saw safely to cut materials</p>	<p>I can select the correct equipment from a range of tools and materials to create my product</p> <p>I can cut, shape, join and finish my product using the correct equipment</p> <p>I can measure and cut materials accurately using a ruler to mark out.</p> <p>I can cut use a saw and woodblock</p>	<p>I can demonstrate skill in using different tools and equipment safely and accurately</p> <p>I can cut and join with accuracy to ensure a good quality finished product</p> <p>I can reinforce and strengthen and 3D framework</p> <p>I can use a hand drill with supervision</p>	<p>I can demonstrate skill in using different tools and equipment safely and accurately</p> <p>I can cut and join with accuracy to ensure a good quality finished product</p> <p>I can, with confidence, pin, sew and stitch materials together to make a project</p> <p>I can sew under supervision</p> <p>I can use sand paper to smooth edges</p> <p>I can construct products using permanent joining techniques</p> <p>I can use a screwdriver</p>
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Evaluate	
	Learning Objectives:

## DT Progression Mapping

	<p>I can notice what other children and adults do, mirroring what is observed, adding variations and then do it spontaneously</p>	<p>I can express and communicate working theories, feelings and understandings</p> <p>I can respond imaginatively to art works and objects</p> <p>I can return to and build on previous learning by refining ideas and developing my ability to represent them</p> <p>I can discuss problems and how they might be solved</p>	<p>I can test my product to see if it functions</p> <p>I can talk about how I would improve my final product if I were to make it again.</p> <p>I can evaluate the functionality of my moving picture</p> <p>I can discuss how I would improve my final product and whether I would use a different mechanism if I created it again</p>	<p>I can discuss existing products and evaluate their purpose</p> <p>I can talk about existing products and how they are appealing to their audience</p> <p>I can evaluate my own, and the work of others, and discuss WWW and EBI</p> <p>I can consider if my product fits its purpose, function and appeal in my evaluation</p>	<p>I can complete market research and evaluate existing products to inform my own design</p> <p>I can describe how my product will be useful and how it appeals to the user</p> <p>I can evaluate my own work linked to the design criteria</p> <p>I can consider the purpose, functionality and product appeal of my product during the evaluation</p> <p>I can evaluate my own work and the work of others and discuss WW and EBI</p>	<p>I can complete research into what my [product] is and its functionality and evaluate the existing product to formulate my own design</p> <p>I can evaluate the purpose and functionality of my [product] and if it works, linked to my design criteria</p> <p>I can evaluate my product thinking about WWW and EBI</p>	<p>I can evaluate existing products and complete market research</p> <p>I can evaluate my own product, identifying strengths and areas for development by carrying out appropriate tests</p> <p>I can evaluate my work by during and at the end of the making process recording where I make modifications</p> <p>I can start to understand how much products cost to make, how sustainable and innovative they are and the impact of products have beyond their intended purpose</p>	<p>I can evaluate existing products and complete market research</p> <p>I can evaluate my products, identifying strengths and areas for development and carrying out appropriate tests</p> <p>I can evaluate my work both during and at the end of the making process recording where I have made modifications as I go along</p> <p>I can to understand how much products cost to make, how sustainable and innovative they are and the impact of products have beyond their intended purpose</p>
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# DT Progression Mapping



Technical Knowledge	
	Learning Objectives

## DT Progression Mapping

	<p>I can Develop new skills &amp; techniques</p> <p>I can use tools for a purpose</p>	<p>I can use different techniques for joining materials</p> <p>I can use tools independently, with care and precision</p>	<p>I can begin to understand the terms 'purpose' and 'functionality'</p> <p>I can name basic tools/equipment and know their use/purpose</p> <p>I know what a lever mechanism is and how it works</p> <p>I know what a slider mechanism is and how it works</p> <p>I know what a wheel mechanism is and how it works</p>	<p>I understand the terms purpose functionality and product appeal</p> <p>I know the characteristics of everyday materials and why they are used for different purposes</p> <p>I can understand the terms 'running stitch' and 'cross stitch' when sewing</p> <p>I know the purpose and functionality of wheels, axles and chassis</p> <p>I know there are two ways of attaching wheels to axis</p> <p>I can experiment with different materials and techniques to combine wheels, axles and chassis</p> <p>I can name a variety of equipment used for food preparation and know their uses</p> <p>I can understand the importance of hygiene when handling food</p>	<p>I understand the term aesthetic quality</p> <p>I know how to use a ruler and read a scale in cm to measure accurately</p> <p>I understand the term market research and why this is useful before designing and making a product</p> <p>I can understand why different mechanisms are used for different products</p> <p>I can recognise products that contain lever mechanisms</p> <p>I can discuss the how to adapt my design with the materials that are available</p> <p>I can create a simple algorithm to explain how my product works.</p>	<p>I understand and can use the term aesthetic quality and be able to give examples</p> <p>I can use a ruler and read a scale in cm to measure accurately</p> <p>I can understand the term market research and why it is useful before designing and making a product</p> <p>I can understand and apply the principles of a healthy diet</p> <p>I can understand the structure of a recipe and be able to follow it</p> <p>I can understand the seasonality of, and know where and how a variety of ingredients are grown, reared, caught and processed</p>	<p>I can understand how mechanical systems such as cams and pulleys or gears create movement</p> <p>I can identify different types of wood and what purpose you would use them for</p> <p>I understand that sometimes raw ingredients need to be processed before they can be used in cooking</p> <p>I can understand that recipes can be adapted to change the appearance, taste and aroma of a dish</p>	<p>I understand and can apply the safety procedures needed when using different tools</p> <p>I know how more complex electrical circuits and components can be used to create functional products</p> <p>I know how to program a computer to monitor changes in the environment and control my product</p> <p>I understand that sometimes raw ingredients need to be processed before they can be used in cooking</p> <p>I can understand that recipes can be adapted to change the appearance, taste and aroma of a dish</p>
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Food and nutrition								
Learning Objectives:								
<p>I can talk about the differences between materials &amp; changes they notice</p> <p>I can make healthy choices (i.e. eating healthy, hygiene etc.)</p>	<p>I can know and talk about the different factors that support their overall health and well-being</p>	<p>I can identify and describe familiar fruits and vegetables</p>	<p>I can apply hygiene rules when handling food</p>	<p>I can understand and apply the principles of a healthy diet</p>	<p>I can revise how to use a ruler and read a scale to cm accurately to support my measurements</p>	<p>I can choose from a wide range of ingredients, considering how the ingredients work together</p>	<p>I can prepare and cook a savoury dish using a range of cooking techniques such as, chopping, peeling, grating, slicing, mixing, spreading, kneading and baking</p>	
		<p>I can taste and describe a variety of fruits and vegetables</p> <p>Design:</p> <p>I can design a recipe that includes fruit and vegetables</p> <p>Make:</p> <p>I can make my food product based on recipe design</p> <p>Evaluate:</p> <p>I can evaluate food product and discuss what I would do differently</p>	<p>I can use a variety of equipment safely and for the correct process such as, cutting, peeling and grating</p> <p>I can use scales to measure ingredients with support</p> <p>I can measure the volume of liquids with support</p>	<p>I understand the structure of recipe and can follow a simple one</p> <p>I understand seasonality and where and how a variety of ingredients are grown, reared, caught and processed</p>	<p>I can measure volumes of liquids accurately</p> <p>I can use the correct knife grip for cutting and spreading accurately</p> <p>I can hold food steady with a fork while chopping/slicing</p> <p>I can prepare a cook savoury dishes using a range of cooking techniques such as; chopping, peeling, grating, slicing, mixing, spreading</p> <p>I can begin to experiment with different combinations of ingredients to create a desirable taste</p>	<p>I can create and write my own simple recipe</p> <p>I can use a range of cooking techniques including chopping, peeling, grating, slicing, mixing, spreading, kneading and baking</p>	<p>I can choose from a wide range of ingredients, considering how the ingredients work together</p> <p>I can create and write my own simple recipe</p>	



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